

Patent Application Title: Ice Melting Package
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BACKGROUND OF THE INVENTION

5 The present invention relates to ice melting packages, and more particularly to such packages that may be used to melt ice or prevent ice buildup on walking surfaces, gutters, roofs, and the like.

Ice melting substances, such as sodium chloride and potassium chloride have been used for many years to melt ice built up on driveways, walkways, roads, roofs, and the like.

10 Generally, the substance is scattered or deposited directly on a surface. The direct contact between the substance and the ice is effective at quickly changing the phase of the ice. However, scattering of the ice melting substance invariably leaves certain areas of ice uncovered, and further poses certain environmental hazards as a consequence of the substance leaching into the ground. In addition, the material may attach to the shoes of people walking over the surfaces which then causes the material to be tracked into homes, cars, and other areas which are not
15 intended to be covered.

It is therefore a principal object and advantage of the present invention to provide an ice melting package that effectively melts ice or prevents the buildup of ice.

It is a further object and advantage of the present invention to provide an ice melting package that is either disposable or re-useable.

20 It is an additional object and advantage of the present invention to provide an ice melting package that is inexpensively manufactured,

Other objects and advantages of the present invention will in part be obvious, and in part

appear hereinafter.

SUMMARY OF THE INVENTION

In accordance with the foregoing objects and advantages, the present invention provides an ice melting package comprising a sleeve composed of a semi-permeable material, such as nylon, and in which an ice melting substance, such as sodium chloride or potassium chloride, is encapsulated. The package is elongated and tubular in shape and is flexible in order to permit its positioning around odd shaped obstacles and in gutters. The semi-permeable nature of the sleeve permits the ice melting substance to contact and melt the ice on which it is positioned in a concentrated manner, while preventing the substance from becoming scattered on the icy surface. The sleeve can either be disposable or provided with a closure, such as a zipper, that would permit it to be refilled with the ice melting substance and reused.

BRIEF DESCRIPTION OF THE DRAWINGS

The present invention will be more fully understood and appreciated through reading the following Detailed Description in conjunction with the accompanying drawings, in which:

Figure 1 is a perspective view illustrating use of the present invention;

Figure 2 is a side elevation view of the present invention; and

Figure 3 is a cross-sectional view taken along line 3-3 of Figure 2.

DETAILED DESCRIPTION

Referring now to the drawings in which like reference numerals refer to like parts throughout, there is seen in Figure 1 several ice melting packages designated generally by reference numeral 10 positioned on various icy surfaces, such as sidewalks 12, driveway 14, roof 16, and gutter 18. Packages 10 are used to melt ice and prevent ice buildup on any surface.

Referring to Figures 2 and 3, package 10 is shaped in the form of a tube and comprises ice melting material 20, such as sodium chloride or potassium chloride pellets, contained within a flexible, semi-permeable sleeve 22, such as one composed of nylon. Sleeve 22 may either be disposable or re-useable. In its disposable form, ice melting material 20 is deposited in sleeve 22 which is then tied off or otherwise permanently sealed at its ends 24, 26.

In its re-useable form, sleeve 22 includes a zipper 28, or other selectively actuated closure, preferably extending along its longitudinal axis X-X (although it could be positioned anywhere on the sleeve). In this embodiment, ice melting material 20 may be deposited within sleeve 22 which may then be closed via zipper 28. Once ice melting material 20 dissolves, more of the same can be deposited back into sleeve 22.

The semi-permeable or porous nature of sleeve 22 permits ice melting material 20 to contact and effectively melt the, or prevent the buildup of ice on the surface on which it is placed. The flexible nature of package 10 permits it to be positioned around or in any odd shaped surfaces.